Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Perplexing Probability*****Experimental Probability Investigation *Pre-Investigation***

1. How many outcomes are there when you flip a coin? \_\_\_\_ What are they? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is the theoretical probability for each outcome? *Fill in each blank with the different outcomes*

P(\_\_\_\_\_\_\_\_) = \_\_\_\_\_\_ P(\_\_\_\_\_\_\_\_) = \_\_\_\_\_\_

1. How many heads would you expect to get if you flipped the coin twice? \_\_\_\_\_ 10 times? \_\_\_\_\_ 100 times? \_\_\_\_\_

500 times? \_\_\_\_\_ 1,000 times? \_\_\_\_\_ 10,000 times? \_\_\_\_\_

1. How many tails would you expect to get if you flipped the coin twice? \_\_\_\_\_ 10 times? \_\_\_\_\_ 100 times? \_\_\_\_\_

500 times? \_\_\_\_\_ 1,000 times? \_\_\_\_\_ 10,000 times? \_\_\_\_\_

1. How many outcomes are there when you spin a spinner with equal sections colored red, orange, purple, yellow, and green? \_\_\_\_ What are they? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. What is the theoretical probability for each outcome? *Fill in each blank with the different outcomes*

P(\_\_\_\_\_) = \_\_\_\_ P(\_\_\_\_\_) = \_\_\_\_ P(\_\_\_\_\_) = \_\_\_\_ P(\_\_\_\_\_) = \_\_\_\_ P(\_\_\_\_\_) = \_\_\_\_

1. How many reds would you expect to get if you spun the spinner 5 times? \_\_\_\_\_ 10 times? \_\_\_\_\_ 100 times? \_\_\_\_\_

500 times? \_\_\_\_\_ 1,000 times? \_\_\_\_\_ 10,000 times? \_\_\_\_\_

1. How many oranges would you expect to get if you spun the spinner 5 times? \_\_\_\_ 10 times? \_\_\_\_\_ 100 times? \_\_\_\_\_

500 times? \_\_\_\_\_ 1,000 times? \_\_\_\_\_ 10,000 times? \_\_\_\_\_

1. Do you expect the theoretical probability to always be the same as the experimental probability? Why or why not? \_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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